

entrants. With access prices well above cost, inefficient entry could be attracted. This is undesirable. Society does not benefit from entry for entry's sake. Entry by efficient firms improves welfare. Entry by inefficient firms might do so, but only by accident. The FCC correctly stressed the importance of establishing the proper "make versus buy" incentives when it published its preference for cost-based pricing of unbundled network elements. Exactly the same logic applies to access charges. Access charges set well above cost induce inefficient firms to enter and "make" their own access, rather than buy access from lower cost suppliers.

30. Second, as we noted above, under current and future access policies where IXC's must pay per minute access charges far in excess of the ILEC's economic costs, an ILEC integrated into interLATA service would have several advantages in competing against other long-distance companies that are unrelated to its cost efficiency or the quality of its products. When an ILEC provides long-distance service, its private marginal cost of access is the same as the true economic marginal cost of providing access (the social cost): The regulated price of access determines only the transfer price between its local exchange and long-distance divisions. For an independent IXC, however, the private marginal cost of access is the regulated access price as long as it must pay access charges to the ILEC. In several important circumstances, the ILEC's private calculation of the "opportunity costs" of taking business away from an IXC will not include the full access profits they would have earned had the business stayed with the IXC.

- a) The ILEC can profitably engage in a variety of non-linear pricing strategies (e.g., volume discounts or multi-part declining tariffs) that independent IXC's cannot

profitably match. Because the ILEC's private marginal cost of access is far less than an IXC's private marginal cost of access, it can profitably offer non-linear pricing packages for its long-distance service (or for bundles that include long-distance and local services) that include deeper discounts for marginal long-distance usage than can the IXCs, which cannot internalize (and thus eliminate) the distortion created by above-cost prices for access. This ability to profitably offer more attractive nonlinear price schedules to consumers means that ILEC could succeed in long-distance competition even though, on all aspects of competition other than price structure, its offering is inferior.²¹

²¹To see how the RBOCs' strategic advantage from nonlinear pricing can arise, consider the following simple example. Suppose that before RBOC entry, access prices were 10 cents per minute, the marginal cost of access was zero, the economic marginal cost of long-distance service was 10 cents per minute, and the price of long-distance service was 20 cents per minute. Consider a customer whose volume was 100 minutes per month.

Now allow RBOC entry without access reform. Suppose demand is linear, with an arc elasticity of minus one, over the 10-20¢ price range. Since access payments within the RBOC are a wash, the RBOC's marginal cost of long-distance is only 10 cents per minute (the economic marginal cost of long distance). The RBOC can offer a variety of very attractive deals. Consider this one: Customers can pay \$14.99 per month plus 10 cents per minute. A customer who accepts will purchase 200 minutes of long-distance service (since the demand elasticity is one). The customer's total payments are \$20 (200 minutes * 10 cents) + \$14.99 = \$34.99. The customer is better off with the RBOC's deal because the \$14.99 monthly fee is less than the \$15.00 increase in consumer welfare from paying 10 cents a minute rather than 20 cents a minute. (The increase in consumer welfare is 10¢ per unit on the original 100 units, plus an amount per unit on the next 100 units that declines linearly from 10¢ per unit to zero (i.e., another \$5.00).

The IXCs cannot match this plan even if they are equally efficient in long distance. Their marginal costs are still 20 cents per minute, so their total costs for 200 minutes are \$40. The plan is profitable for the RBOC even if it must "impute" the \$10 in access fees the IXCs would have received from the customer at the old, 20 cents per minute price of long distance. The "opportunity cost" of the 200 units would be the economic cost of long distance of \$20.00 plus the foregone access profits of \$10.00, resulting in an total cost of \$30.00. The RBOC makes a

Economists have long supported reform of access pricing. The ability to price more efficiently should not be limited to the ILECs, however, but that is exactly what would occur if ILECs are allowed to enter long distance before state and federal access price reform is completed. The profitability of nonlinear pricing depends on the level of access charges and of economic marginal costs and the percentage of long-distance calls that are completed within the ILECs' territory.

If fully exploited, this competitive advantage due to the nonlinear pricing advantage an ILEC derives from access mispricing can be equivalent to about 10% of average long-distance revenues excluding access payments, or about 6-7% of per unit revenues including access charges for calls that both originate and

profit before imputation of \$14.99 on the customer (\$34.99 revenue minus \$20 in long-distance costs), and retains a profit of \$4.99 after imputing \$10 in access charges. In contrast, the IXC that matched the RBOC price would lose \$5.01 on the customer.

terminate in its territory.²² This is hardly a modest advantage, especially since long-distance profits are less than 10% of revenues.²³

- b) The RBOCs will have a competitive advantage in competing to provide switched service for the patronage of a customer for whom special access is a serious option. The RBOC faces no access opportunity cost, since if the customer chooses special access, the RBOC will earn no access revenues. Nonetheless, an IXC faces a private marginal access cost if it contemplates trying to compete with a switched service offering. As a result, the RBOC will be

²²This calculation is based on a demand elasticity of -0.7 to -1.0 for long-distance service, an average long-distance price of 15 cents per minute, and access profit margins at both ends totaling 5 cents per minute. (Demand elasticity measures the sensitivity of consumers purchases to price. Demand is said to be inelastic when the elasticity is between 0 and -1.0.) For linear demands (demand curves that when plotted are straight lines) with these arc elasticities (the elasticity calculated between two points on a demand curve when the elasticity is not the same at all points), the RBOC's cost advantage is 12.5% with unitary elasticity, and 8.75% with a demand elasticity of -0.7. The equivalent cost disadvantage is larger for lower long-distance prices and higher access prices, and a ILEC's cost advantage is roughly one-half as large when it only controls one end of the phone call.

The RBOCs' artificial advantage is greater than that of smaller ILECs because of the greater frequency with which the RBOCs service both ends of a call. This advantage increases when RBOCs merge.

²³We believe that, without access price corrections, the pricing advantage for the ILECs in long-distance service could be very substantial. Apparently BellSouth witness Dr. Hausman believes so as well. He is quoted by *The Economist* as saying that the Bells "will offer untimed long distance. Their customers really want that." See *The Economist*, "Survey Telecommunications," September 13, 1997, p. 10. The Bells' ability to offer untimed long distance service is a direct function of the fact that their private marginal costs of access are so low. The IXCs, saddled with excessive access charges, cannot compete effectively with such offerings solely because of the regulatory access price distortions. Per minute access charges are a private marginal cost to them but not to the ILECs.

uniquely positioned to win customers when the economic cost of switched access is less than that of special access.²⁴

- c) The RBOC will sometimes find it profitable to charge its affiliate lower de facto access charges than it charges independent IXC's, if for regulatory purposes the RBOC's access profits are assessed over the combined contributions of its long-distance affiliate and the IXC's, and if either federal or state access prices are subject to cost of service regulation or any price cap scheme with formal or informal profit-sharing.²⁵ In particular, if access profits are close to the point where regulators would be inclined to reduce the access rate, then waiving access fees for the affiliate but not for independent IXC's will be profitable. Access profits go down as the affiliate takes business away from independent IXC's, thus removing the threat that regulators will force an across-the-board access price reduction. Further, the RBOC's long-distance affiliate derives a competitive advantage: Its costs for the most important input are in fact lower than the costs paid for access by the IXC's. In effect, the RBOC is able to take profits via

²⁴See Franklin M. Fisher, An Analysis of Switched Access Pricing and the Telecommunications Act of 1996, submitted as Attachment 1 to Reply Comments of MCI Telecommunications Corporation, CC Docket No. 96-98, filed with the FCC on May 30, 1996.

²⁵That is, even though the affiliate "pays" the same access charge, on an integrated basis the true payment is less than the "hard costs" actually paid by the IXC's. The affiliate loses money but, in the circumstances described in the text, the discrimination is profitable on an integrated basis.

waiving access fees for its affiliate that it could not realize directly through access profit margins.

31. Note that these are not “price squeeze” arguments. In a price squeeze the competitive harm arises because the upstream monopolist effectively charges a lower price for its monopoly input to its own affiliate than to unaffiliated downstream competitors, thereby squeezing the margins of downstream competitors. The Federal Communications Commission and the Department of Justice, while acknowledging the possible theoretical validity of such arguments, have declined to base (or recommend basing) public policy on the possibility that RBOCs will engage in price squeezes.²⁶ In each of the cases described above, the ILEC obtains a competitive advantage because it alone is permitted by regulation to price most efficiently. Tilting the playing field to so favor the ILEC is inefficient and violates the recommendation of Schwartz and Farrell that the playing field be leveled at a higher level.²⁷ That would require pricing access at cost so that all long-distance carriers could price efficiently. Absent such reform, the ILEC can succeed in long-distance competition even though, in all respects other than price structure, it is less efficient than the other carriers.²⁸

²⁶See Affidavit of Marius Schwartz for DOJ, “Competitive Implications of Bell Operating Company Entry into Long-Distance Telecommunications Services,” filed in CC Docket No. 97-121 (May 14, 1997) at paragraph 125.

²⁷Schwartz Affidavit at paragraph 71.

²⁸The argument that it is better for the ILEC alone to price efficiently than for no one to price efficiently is not compelling. If some protectionist states began enacting laws that allowed only the ILECs to use digital switches, while limiting everyone else to analog switches, would it be

B. Regulatory imputation cannot prevent the competitive problems arising from access price distortions.

32. First of all, regulatory “imputation,” as conventionally practiced, only sets a low price floor on the LECs’ service offerings to prevent blatant predatory pricing. As such, it does not and cannot address the competitive advantages described above that LECs will obtain in long-distance service so long as regulated access prices remain far above cost. In each of the cases described above, conventional regulatory imputation, even if perfectly administered (which is often far from the case) will not eliminate the ILEC’s competitive advantage. As the only competitor whose private access costs are the true, and very low, marginal costs, the ILEC will have a competitive advantage unrelated to its efficiency as a long-distance carrier, and it will not need to price predatorily (and possibly violate the regulator’s imputation standard) to realize the benefits of this advantage.²⁹

33. Second, even if properly defined and enforced, an imputation standard is often nothing more than an internal accounting or bookkeeping measure. For an ILEC, imputing access

acceptable to argue that the RBOCs in those states should be allowed into long distance so that consumers could get the benefits of digital switching? We think not. Regulatory favoritism that limits deployment of more efficient business practices only to the favored ILECs, whether it involves efficient switches or efficient price structures, is both perverse and anticompetitive.

²⁹We are not suggesting that perfect regulation could not solve the problem. By definition, perfect regulation can optimally solve any problem. However, in this context perfect regulation would require, at a minimum, that to correct the artificial competitive advantage associated with nonlinear pricing, the imputation test must be applied customer by customer and tariff element by tariff element. Even if attempted, such customer and element-specific regulation would be extremely expensive and, to say the least, is not likely to be administered perfectly.

charges means only that money is going from one pocket into the other. In contrast, for an IXC, paying access charges means that money goes from the IXC to the ILEC. Imputation does not change an integrated firm's profit maximizing strategy in circumstances where, such as described above, the imputation price constraints are not violated. In those circumstances, imputation provides no practical protection to competitors against the competitive advantages ILECs will have in pricing long-distance services.

34. Third, imputation is difficult to define and enforce. Proper imputation studies require that the ILEC service be carefully defined so that the precise elements of access can be properly imputed. Moreover, enforcement is always a practical problem. Competitive harm occurs as soon as an ILEC begins to offer the service. After-the-fact determinations that an ILEC service fails an imputation standard, months or years after the ILEC begins offering the service, does not help unless regulators award multiple damages to all rivals whose business was harmed. That is something that has generally not been done. With more and more toll offerings, the battles over imputation will become more and more complex.

C. Access "reform" that is limited to allowing market forces to operate in the local exchange is a highly imperfect remedy. Access prices should be prescriptively reduced to economic cost.

35. The "market" approach to access reform relies on increasing local competition to gradually bring access charges down to cost. There are two problems with this approach. First, even for originating access, this process may well require a very substantial degree of local

competition. The initial entrants into the local exchange markets, faced with limitations on their ability to expand capacity or increasing costs for more rapid expansion, may well not immediately bid down per unit prices for originating access. Given the very high current access profit margins and only a small, gradual, and localized loss of market share, the ILECs cannot be expected to respond with widespread cuts in originating access prices. The expected outcome does not change significantly if the ILECs are allowed to de-average access prices on a very localized basis. While the local price reductions may be larger and more immediate, originating access prices will not be bid down on a widespread basis until local competition is geographically widespread, since the ILEC will only cut prices where it faces actual competition.

36. Second, given current institutional arrangements for retail telephone pricing, local competition will affect terminating access charges only very slowly. The customer, when choosing its local carrier, also chooses the carrier who will carry its terminating access, in which case the local carrier “owns” the customer for termination. That “ownership” creates incentives to charge high terminating access prices, since the calling customer pays the entire cost of the call, even when competing facilities are physically able to terminate calls. As a result, competition will likely affect market-based terminating access charges more slowly than it will affect prices for originating access. The FCC’s access charge order proposes reducing terminating access charges to 1.2 cents per minute. While this is a step in the right direction,

even the 1.2 cents per minute charge is well above the economic cost of providing terminating access.

IV. LOCAL COMPETITION

A. The role of effective local competition in preventing competitive abuses.

37. In the long-distance market, effective local competition can loosen an RBOC's current bottleneck control of essential facilities. To the extent effective local competition exists and to the extent interexchange carriers have the ability to influence the customer's choice of local providers (for example, by offering pricing plans that reflect reduced originating access charges), an RBOC's incentives to keep originating access rates high are reduced. Similarly, effective facilities-based local exchange competition would reduce an RBOC's incentives to engage in other (non-price) activity that would raise the cost to interexchange carriers.

38. In the local markets, effective facilities-based competition means that new entrants are no longer solely or substantially dependent on the RBOC to provide local service on a widespread basis. As a result, exclusionary behavior by the RBOC becomes less profitable and less likely, since exclusion is most profitable before the entrants have realized market acceptance sufficient to at least challenge the incumbent's market power.

B. The appropriate analytic standards for assessing local competition: How much local competition is enough to warrant allowing an RBOC into in-region, interLATA service?

39. Let us first define some terms. The term “facilities-based competition” in the local exchange market refers to competition from a supplier of local exchange services using its own (upstream) facilities. “UNE-based competition” in the local exchange market refers to competition from a supplier of local exchange services that purchases some of its upstream unbundled network elements from the ILEC. “Resale” refers to competition in the local exchange market based on firms that purchase the ILEC’s local service at wholesale and resell that service to customers.

40. Resale competition by itself cannot provide effective local competition to the ILEC, and UNE-based competition has limited potential to provide fully effective local competition.

41. Resale is desirable for a number of reasons. In particular, resale inhibits price discrimination and thus reduces the ILEC’s ability to fully exploit its market power at the upstream level (i.e., the wholesale, or UNE, stage). Resale may also facilitate eventual entry into the wholesale stage, by allowing entrants to establish a customer base before investing in their own facilities.³⁰ However, resale has no immediate effect on the ILEC’s market power at the

³⁰Resale of AT&T’s long-distance services during the early years of long-distance competition did serve this function -- MCI, and later Sprint, were able to serve customers on a nationwide basis before they had nationwide facilities themselves.

upstream level. Resale by itself is thus not an answer to concerns over wholesale market power.³¹ Even if an RBOC lost all its retail sales to resellers but only to resellers, with no competition from facilities-based entry or from competitors relying primarily on unbundled network elements, the RBOC would retain its wholesale market power, since it would face absolutely no competition at the wholesale stage. Most states have been setting resale discounts at around 20% of the retail price, implying that resale competitors will not be competing against RBOCs for over 80% of the value added in local service.³²

42. Resale on a widespread basis has little effect on an ILEC's market power, so it would be especially inappropriate to view the mere possibility of future resale competition as a reason for concluding that an RBOC currently faces effective local competition. Resale may facilitate the development of local competition by allowing a new competitor to assemble an adequate customer base to warrant investing in its own facilities. That is the only way resale contributes to any local competition other than for retailing functions. If the wholesale discount turns out to

³¹Resale can help increase price competition at the wholesale stage when there are two or more wholesalers. Because resellers aggregate the demands of smaller customers, they can better negotiate low prices by threatening to take their combined volume of business elsewhere. A threat of this sort will not be credible in local telephone markets any time soon, however, since resellers, in almost all foreseeable circumstances, will have no other facilities-based supplier to which to turn as an alternative source of wholesale capacity.

³²If the resale discount is 20%, resellers compete for considerably less than 20% of an RBOC's revenues from each customer, since the RBOC keeps access revenues even when a reseller captures the customer.

be too low to allow resale competitors to gain much share, the process of moving from resale to facilities-based competition could be cut off in its incipency.

43. Competition based on UNEs is critical but is not a solution to the problem of discrimination once RBOCs that control upstream, bottleneck facilities are allowed into long distance. If the only meaningful competition to the ILEC in the downstream local exchange market comes from competitors purchasing UNEs at prices constrained by regulation, then the RBOC's prices at retail will remain largely determined by regulation, not by market forces.³³ As long as the prices for UNEs are constrained by regulation, the RBOC retains its incentive to evade regulation. Effective competition in the market for local exchange services would then require effective regulation in the market for upstream elements.

44. This is, however, easier said than done. Regulators have limited budgets, and it will be difficult to evaluate cost studies and claims of technical infeasibility. Even if we get to the point where customers and regulators agree that with today's technology the regulations are working well, one has to start all over again in developing regulatory benchmarks and other transaction criteria as technology changes. Thus, effective competition based on unbundled network elements is reversible. As discussed above, however, once allowed into interLATA long-distance service, an RBOC would lose any incentive to cooperate with CLECs in developing

³³Even if retail prices fall below the maximum retail prices allowed by regulators, competition will only be setting the markup over the regulated price for unbundled network elements.

reasonable and nondiscriminatory terms for the sale of unbundled elements incorporating new technology. That is why the best evidence of local competition is actual, facilities-based entry. Once such investments have been made, the entrants are committed to the market for some period of time. And, because they control their own facilities, entrants and their customers are less susceptible to discrimination by the incumbent local monopolist.

45. In the absence of such facilities-based competition, regulation could be expected to be effective in controlling an RBOC's incentives to discriminate only if the transaction was standardized and not subject to significant technical change, and if natural benchmarks for reasonable performance and adequate enforcement mechanisms were in place.

46. Natural benchmarks might be derived from examining similar transactions where an RBOC had an incentive to complete the sale, as opposed to frustrate it. For example, it might turn out that the sale of unbundled loops will become a standardized transaction for a product that is expected to experience minimal technical change. If an RBOC's performance in provisioning unbundled loop service to customers it loses can be directly compared to its performance for customers it retains or recovers and if the IXC receives service comparable to that received today by a retail customer on new service orders, then natural benchmarks may be available.

47. Product standardization and the availability of natural benchmarks mean that regulators could, in principle, impose a reasonable set of performance criteria on an RBOC, and the assumption of stable technology, if valid, implies that the beneficial effects of the initial regulations are more likely to be irreversible.³⁴ Even here, however, the regulator would have to detect and punish adoption by the RBOC of a contrived change in technology that would not have been adopted but for the fact that it would allow the RBOC to force its competitor-customers and regulators to start over in negotiating and regulating new performance criteria for the sale of unbundled elements. Thus, the set of circumstances where regulation can be relied upon to protect the competitive process appears limited and, therefore, UNE-based entry will probably not result in effective local competition.

C. Measuring effective local competition.

48. The framework for assessing market power and competition is provided by the modern economics of industrial organization. The mainstream view in industrial organization is sometimes referred to as the structure-conduct-performance paradigm. This paradigm provides the conceptual basis for the *Merger Guidelines*, which are used by federal antitrust authorities (and many federal courts) in analyzing mergers and other antitrust issues. The overall concepts for assessing the degree of market power or competition found in the *Guidelines* are applicable to

³⁴Indeed, enormous welfare gains can be realized by government standard-setting, even where private firms, absent the government-imposed standard, would choose noncompatible, proprietary standards. The terminal equipment market became far more price competitive and exhibited far greater technological change after the FCC imposed standards that sharply reduced the ability of the Bell System to prevent interconnection of non-Bell equipment.

assessing competition and market power issues quite generally, and not just in the context of a merger. The basic *Guidelines* framework is applicable to measuring effective competition for purposes of implementing the reforms called for by the 1996 Telecommunications Act, although some extensions of that framework are necessary in the context of a firm with market power whose pricing is effectively constrained by regulation. The FCC has previously endorsed the principles in the *Merger Guidelines* in its RBOC non-dominance order. The discussion below uses the concepts from the *Merger Guidelines* and the structure-conduct-performance paradigm for assessing the degree of local competition.

49. In unregulated markets, the absence of unilateral market power is generally inferred from either a low (enough) share of total capacity or, even if the firm in question has a high market share, by the demonstrated ability of its competitors to rapidly increase their market shares at prevailing prices. In a regulated market, however, a necessary condition to infer the absence of market power is that the firm's price is below the regulated maximum.³⁵ A firm with market power may, of course, find it profitable to set its price below the regulated maximum levels, but pricing by a monopolist or dominant firm at the maximum allowed by regulation clearly implies the existence of at least some unexploited market power. In that latter case, whatever competition exists is not yet sufficient to replace regulation as the constraining force on the

³⁵We assume that the regulated price is not below the competitive level. If a regulated firm's prices are set below competitive levels by regulators, the market valuation of the firm's assets would be below book levels. This is hardly the case for the RBOCs.

dominant firm's pricing. For example, consider access charges. Access prices far exceed costs, by any measure,³⁶ but the RBOCs' access prices have consistently been at the regulated ceiling, indicating that if regulation were to be withdrawn, the RBOCs would find it profitable to raise prices even further.

50. Whether regulated maximum prices are binding is important for more than just establishing market power. The incentive to cross-subsidize or discriminate against downstream rivals depends importantly on whether competition or regulation is constraining that firm's prices in upstream and/or downstream markets.

51. In evaluating the likely effects of allowing an RBOC into long distance, therefore, a very important question will be whether the RBOC has been pricing consistently below its regulated maximum prices in both downstream and upstream local markets for a significant period of time and can be expected to continue to do so in the future. In downstream retail markets, where the sunk cost of entry through UNEs or resale will be lower and thus entry more likely, pricing below the regulated maximum price for a significant period of time may be sufficient to infer that competition rather than regulation is likely to continue as the constraining force in that market. In the upstream, UNE market, however, where the sunk costs of entry are much larger and entry

³⁶Salomon Brothers observed that "switched access priced at \$0.03 per minute is probably one of the highest margin legal businesses in the U.S." See Salomon Brothers, Regional Bell Operating Companies - Opportunities . . . While Danger Calls, January 1996, p. 20.

barriers greater, an inference of continued effective competition requires assurances in terms of both current performance and structure. If an RBOC has consistently been pricing all UNEs at levels below the regulated maximums and its facilities-based competitors at the upstream level have a sufficiently large share of upstream capacity, one can infer that competition will continue to be the constraining force in those upstream markets.

52. Because entry will probably occur far more slowly at the upstream, UNE stage, the state of competition there will determine how long the RBOC will retain market power in the local exchange and the resulting incentive to leverage market power into adjacent markets. But how should regulators determine when sufficient facilities-based entry has occurred to ensure competition has eliminated the RBOC's incentive and ability to engage in anticompetitive behavior? At a minimum, that point will have arrived when regulation of UNE and retail prices is no longer necessary. Any determination that the RBOC's retail and UNE rates should no longer be regulated would best be made by the state public utilities commission. If the RBOC cannot convince its state regulator that profit and rate regulation is superfluous and unnecessary (presumably because any price increase following deregulation would be "insignificant"), a substantial degree of skepticism is warranted that effective competition exists in fact for the RBOC's local exchange services. Regulation is expensive, and a state regulator acting in the interests of consumers and taxpayers should be willing to stop regulating the RBOC's rates and profit levels if it is convinced that competition is now almost as good as regulation in constraining the RBOC's prices at the retail and UNE levels.

53. Under the market share standards generally used in antitrust,³⁷ an RBOC would be presumed to still possess market power, before considering other factors, as long as it retained a market share above about 60-70%. Other factors could alter the presumption in either direction; shares above that level might not convey market power, and market power could still be present with shares below that level. However, the entry barriers raised by the substantial sunk costs associated with entering the local exchange market on a facilities basis strongly suggest that, but for regulation of its retail and UNE prices, an RBOC would be able to exercise substantial market power as long as it retained a large share of upstream capacity.³⁸ Moreover, any presumptions for RBOC entry into long distance based on market shares would require that the geographic market was defined correctly.

54. It is clear, however, that the correct geographic markets are far less than statewide in scope. The “local” in local exchange service is not a misnomer: The arena for effective competition with an RBOC is in fact very local. A customer does not yet have an effective

³⁷Regulation may prevent the direct and complete exercise of market power by limiting the firm’s prices and profits, but, as we have stressed, this very constraint gives rise to incentives to take the monopoly profits in adjacent, unregulated markets.

³⁸Because we have so little experience with local competition, it is not possible to say now which share measures will be most useful in assessing an RBOC’s market power. If it turns out that entrants can quickly convert capacity to sales by slightly undercutting the RBOC’s prices, then capacity measures of market share will be more appropriate. If it is very difficult for entrants with capacity to gain sales even if they slightly undercut the RBOC’s local prices, then sales-based market share measures will be more appropriate.

competitive alternative unless the competing local carrier can provide retail local exchange services that are a) equivalent in price quality (or in quality-adjusted price) to the RBOC's offering and b) not dependent on the RBOC for any element or service that is essential for providing those final services to that customer on a cost-effective basis. Effective competition thus is assessed on a customer-by-customer basis: Just because a customer in city A has meaningful local service alternatives does not imply that another customer in city B halfway across the state has similar alternatives, nor does it imply that the customer in city A has local service alternatives for local termination of calls to city B. Similarly, just because one customer has a meaningful alternative does not mean that other customers a small distance away in the same city also have meaningful alternatives. For example, the sunk costs of extending service from a fiber ring to a building a few hundred feet away from the ring can be substantial,³⁹ in which case service via the fiber ring is not a meaningful alternative for customers very close to, but not on, the ring.

D. The potential for rapid growth of new local competitors cannot now be assumed sufficient to force an RBOC to price its services at competitive rates.

55. The "easy entry" argument posits that the potential for growth by facilities-based competitors is very high, so the de minimis shares of existing local competitors do not imply that an RBOC will retain market power and the ability to discriminate in the near future. In economics jargon, a market where high market shares don't imply market power because of very

³⁹See Hatfield Associates, Enduring Local Bottleneck II, April 30, 1997.

easy entry is termed a contestable market. Because of the high sunk costs of facilities-based entry, or UNE-based entry, the local telecommunications markets are not contestable.⁴⁰ It is important to understand why.

56. At most, the argument is highly geographically specific. Consider first the case where the entrants' combined market share in one locality is small. For an alternative carrier to be a meaningful alternative to a current customer of an RBOC, that alternative carrier must face at most insignificant customer specific sunk costs to reach additional customers. If in fact actual local competition is limited to a few niches because the competitors face significant sunk costs to expansion, then a regulated bottleneck monopoly remains, and allowing the RBOC to enter long distance would entail substantial risks to competition. Excessively high non-recurring charges for unbundled network elements are a good example of customer specific sunk costs that inefficiently deter entry.

57. Now consider whether effective local competition in city A implies that an RBOC will soon face effective competition in other areas. In essence, the RBOC would be arguing that effective competition in city A implies that rapid expansion is both feasible and likely in other areas in the face of an exercise of market power. In order to reach that conclusion, however, one

⁴⁰Even economists who often work for the RBOCs recognize that "contestability . . . certainly does not apply to telecommunications." See Jerry Hausman and Timothy Tardiff, Antitrust Bulletin (1995).

would have to know either that entrants have sunk or are in the process of sinking the costs necessary to enter the other areas (but do not yet have much market share), or that other markets are similar in all important respects to the city A, so that profitable entry in city A can be expected to be reproduced elsewhere. However, when local entry occurs in a systematic order (e.g., first in high density areas), entry in one area clearly does not imply that similar entry will occur elsewhere.

58. Problems in obtaining entry at multi-tenant buildings can also impose costs that make it uneconomic for a CLEC to provide service to the building even though it is a “short” distance to the CLEC’s network. Because of the possible costs of dealing with more than one local telephone company, building owners may be reluctant to allow a CLEC access equivalent to that of the incumbent LEC to the common telephone spaces in the building. The entry-retarding effects of this natural or cost-based impediment to local entry can be exacerbated by exclusionary contracts between the incumbent LEC and building owners.⁴¹ For example, contracts for exclusive rights of building access for local service marketing will raise the costs of entry. If incumbents are allowed to direct elements of competition between themselves and new entrants to a bidding contest over exclusive rights, the extent of entry will likely be reduced.

⁴¹See In the Matter of Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, CS Docket No. 96-133 (December 26, 1997), at paragraphs 196-200.

59. The Federal Communications Commission should pay close attention to data comparing the rate at which an RBOC can enter into long-distance service with the rate at which local competitors can enter local service with UNEs purchased from the RBOC. The RBOC controls an important feature of both entry scenarios: It processes and implements the changes consumers make in their long-distance carrier, and it also must process and provide orders whereby new local competitors serve their customers in part with unbundled network elements obtained from the RBOC. Right now, those two entry processes would occur at enormously different rates. RBOCs now process thousands of PIC changes per day in long distance, utilizing well-tested and computerized methods. The RBOCs' ability to supply unbundled loops (or other UNEs) to local competitors is nowhere near as well developed. Obviously, if an RBOC can enter long distance at a far faster rate than it permits others to enter local service, it will have an enormous competitive advantage in competing for those customers who, for whatever reason, prefer one-stop shopping. (Other one-stop shopping issues are addressed in detail below.)

E. The risks of premature entry by the RBOCs into interLATA long-distance service are far greater than the risks of delaying their entry until local competition is well-established.

60. RBOCs may argue that they will face a competitive disadvantage in local competition if their local competitors can compete on an integrated basis, while they are denied authority to offer interLATA service. They also may object that the FCC can always rescind a grant of interLATA authority if the Commission later decides that, because of post-entry anticompetitive

behavior, RBOC provision of interLATA service is not in the public interest. These arguments are related, and both are fallacious.

61. Once an RBOC has been allowed into interLATA long distance, there is good reason to believe that, except for grossly egregious behavior by the RBOC, the decision will not be reversed easily. The FCC will not want to tell customers that they can no longer deal with their chosen vendor, even though that customer preference may be based on discrimination or cross-subsidy. Switching costs will be imposed on customers. The reality is that regulators are likely to view interLATA entry approvals as irreversible, with the removal of authority, once granted, viewed as highly unlikely absent truly egregious behavior.

62. When a decision is irreversible, and there is uncertainty that can be resolved by waiting, then it is optimal to wait for new information so long as the information will resolve some of the uncertainty⁴² and the costs of waiting are low. This applies to public as well as private decisions. Here there are two major sources of uncertainty. The first concerns what terms and conditions will apply to competitors' future purchases of unbundled network elements from RBOCs and what principles the regulators will use for determining those terms and conditions.⁴³ The second concerns how well the procedures for purchasing unbundled elements actually work in practice

⁴²See Avinash Dixit and Robert Pindyck, *Investment Under Uncertainty*, Princeton University Press (1994).

⁴³This uncertainty has been increased by litigation filed by the RBOCs and some state commissions to overturn the FCC's rules under the 1996 Act.

and how much local competition based on these procedures will develop. These issues can only be resolved by waiting and basing judgments on the actual terms and conditions for the purchase of UNEs, and the actual procedures as they work in practice.

63. The RBOCs cannot argue plausibly that there is a significant social cost to waiting. If they argue that it will take a long time to iron out the details for implementing transactions for unbundled elements, the implication is that, for a long time, entrants will be subject to seemingly plausible difficulties and excuses that impede local entry. But the FCC and state regulators are unlikely to impose major penalties on RBOCs where the troubling behavior falls in a gray area. Even where an RBOC is told to alter its practices, unless the regulator is convinced that its explanations for delays and problems are entirely without merit, the only likely remedy is forward-looking injunctive relief.⁴⁴ This gives the RBOCs a substantial ability and incentive to delay any efficient local entry that depends on their cooperation.⁴⁵

64. The current strategies and investments of many telecommunications companies, including MCI, are premised, in part, on the perceived preferences of some telecommunications consumers for one-stop shopping. To the extent consumers in fact turn out to prefer one-stop shopping, a natural question is the effect of such preferences on the timing of RBOC entry into

⁴⁴This not a mere theoretical prediction. As reported above, Ameritech's only penalty for the repeated rejection of its tariff filings for interconnection and unbundled loops by the Michigan Public Utilities Commission was to be told to refile.

⁴⁵Imagine if the IRS's worst sanction were to tell tax evaders to go and sin no more.